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CLAIMS:

What is claimed is:

1   1.   A method for georeferencing a raster map image,
2   comprising the steps of:
3   displaying a raster map and a georeferenced map;
4   identifying at least two geographically corresponding
5   points on the raster map and on the georeferenced
6   map;
7   associating an image coordinate of each point on the
8   raster map with a geographic coordinate of the
9   corresponding point on the georeferenced map;
10   determining a functional relationship between the image
11   coordinates and the geographic coordinates; and
12   thereafter, for each additional corresponding points
13   identified on the raster map and the georeferenced
14   map,
15   revising the functional relationship between the
16   image coordinates and the geographic
17   coordinates according to the additional
18   corresponding points, and
19   disregarding any points which are substantially
20   inconsistent with the functional
21   relationship.

1   2.   The method of claim 1, further comprising the step of:
2   using the functional relationship to determine the
3   geographic coordinates of features on the raster
4   map.

1	3.	The method of claim 1, further comprising the step of:
2		storing the functional relationship with the raster
3		map.

1	4.	The method of claim 1, further comprising the step of:
2		when the raster map is manipulated by a user,
3		manipulating the georeferenced map accordingly.

| 5. | The method of claim 1, wherein the geographic coordinates are latitude and longitude. |

| 6. | The method of claim 1, wherein the raster map and the georeferenced map are displayed on the same computer display. |

| 7. | The method of claim 1, wherein the corresponding points are marked by a user after visually determining geographically corresponding points. |

1	8.	The method of claim 1, wherein the functional
2		relationship is represented by a set of general linear
3		functions.

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9.   A computer system, having at least a processor
connected to communicate with a readable and writeable
memory, comprising:
     means for displaying a raster map and a georeferenced
map;
     means for identifying at least two geographically
          corresponding points on the raster map and on the
          georeferenced map;
     means for associating an image coordinate of the each
          point on the raster map with a geographic
          coordinate of the corresponding point on the
          georeferenced map;
     means for determining a functional relationship between
          the image coordinates and the geographic
          coordinates; and
     for each additional corresponding points identified on
          the raster map and the georeferenced map,
          means for revising the functional relationship
               between the image coordinates and the
               geographic coordinates according to the
               additional corresponding points, and
          means for disregarding any points which are
               substantially inconsistent with the
               functional relationship.

10. The system of claim 9, further comprising:
          means for using the functional relationship to
               determine the geographic coordinates of features
               on the raster map.

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1   11. The system of claim 9, further comprising:

2   means for storing the functional relationship with the

3   raster map.

1   12. The system of claim 9, further comprising:

2   means for, when the raster map is manipulated by a

3   user, manipulating the georeferenced map

4   accordingly.

13. The system of claim 9, wherein the geographic coordinates are latitude and longitude.

14. The system of claim 9, wherein the raster map and the georeferenced map are displayed on the same computer display.

15. The system of claim 9, wherein the corresponding points are marked by a user after visually determining geographically corresponding points.

1   16. The system of claim 9, wherein the functional

2   relationship is represented by a set of general linear

3   functions.

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